

*Hudson Light  
and Power  
Department*

*1998 Annual Report*

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*Some of the best companies around are the quiet ones like the Hudson Light and Power Department. With little fanfare or interference to our customers' lives, we go quietly about the business of keeping their homes and businesses lit and warm.*

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## *A Message From the Board*

**S**ome of the best companies around are the quiet ones like the Hudson Light and Power Department. With little fanfare or interference to our customers' lives, we go quietly about the business of keeping their homes and businesses lit and warm. We make it seem easy, when in fact almost every minute or every working day is filled with preparations for the future. During 1998, this focus on preparedness was never more evident as the Department entered its second century of service to our customers.

Private electric companies in Massachusetts went down a brand new road in March of 1998 when industry restructuring became law and competition was introduced into the business. Tariffs were reduced, bringing them more in line with the low rates already offered by municipal light departments such as Hudson. On the home front, we worked on plans of our own that will help protect our customers while allowing the Department to be as competitive as possible in this new world. We want to make absolutely sure that any local transition into the open market will be made as seamlessly as possible for our customers. They rely upon us to do so.

Probably the only issue that garnered more media attention during 1998 than electric industry restructuring was the Year 2000 (Y2K). Once again, the Hudson Light and Power Department has been quietly moving forward to ensure that service is not adversely impacted when the much-debated Y2K arrives. At a time when many local businesses were beginning to look into the possible impact of Y2K on their computers and equipment, the Hudson Light and Power Department's program was near complete. We have reviewed, replaced, upgraded, tested and re-tested our own equipment. A close eye has been kept on region-wide plans to monitor the Y2K compliance progress of New England's electric grid from which we are fed. When the clock strikes midnight at the close of 1999, Hudson Light and Power Department customers will have the confidence of knowing that not only is their electric department Y2K ready, but that it will also be staffed with additional crews just in case the unexpected occurs.

This type of in-depth planning is an everyday occurrence at the Hudson Light and Power Department. There are emergency procedures in place for almost any possible event imaginable. When major storms threaten, steps are immediately taken to ensure that crews are available to answer customers' calls and to restore service if necessary. Medical emergency lists are distributed and arrangements are made to keep the crews working non-stop for as long as possible. When power shortages are predicted across New England, a dialogue is immediately established with customers who participate in our Voluntary Load Curtailment/Notification Program. On a day-to-day basis, the distribution system is continually upgraded and maintained, while our tree service keeps the wires clear of limbs that could cause damage.

Our customers may not see the tremendous amount of preparation that goes into ensuring the reliability of their electric service - but they do see the end result at the flip of a switch. The Hudson Light and Power Department is proud to be able to boast of one of the best service interruption records in the nation. That means that not only can we restore power faster than the average utility, but that we also have taken all the preliminary steps to safeguard the system from any interruption in the first place. When you need us, we are there.

With such major uncertainties as restructuring and the Year 2000 looming before the Department and its customers, we feel confident that there is no better utility to be serviced by than the Hudson Light and Power Department. Our customers need only look at our performance to date to know that we will take them into the future in the same style as we have served them in the past - quietly and reliably.

Respectfully submitted,  
Hudson Municipal Light Board

*Weedon S. Parris, Jr., Chairman*

*Roland L. Plante, Member*

*Horst Huehmer, Clerk*

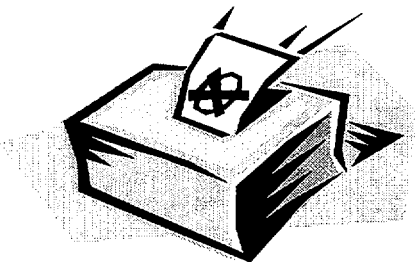
# ***Manager's Report***

## ***Electric Industry Restructured***

In March of 1998, private electric utilities in Massachusetts changed the way they do business and opened their borders to competition for the first time in history. The move came after the State signed electric industry restructuring into law at the end of 1997. The hope is that by allowing competition on one part of a customer's electric bill – generation – energy costs will decrease and Massachusetts' economy will flourish. New England has historically had higher electric costs than the rest of the nation due to lack of local federally-funded water power, past prohibitions against constructing low-cost fossil fuel-powered plants, and lack of natural resources in the area.

A common misconception about restructuring is that it allows the customer to choose his or her electric utility. The private utility, such as Massachusetts Electric and Boston Edison, that services a customer remains the local utility under restructuring and performs such services as reading the meters, maintaining the distribution system, rendering the bills, purchasing power, etc. What their customers can now decide is who will purchase electric power in his or her behalf. Likewise, the term commonly used to describe restructuring – deregulation – is a misnomer. The electric industry is still regulated by the Massachusetts Department of Telecommunications and Energy (DTE), formerly the Department of Public Utilities (DPU). The generation end of the business is no longer regulated.

With their relatively low rates, municipal light departments such as Hudson were specifically exempted from the new law. Customers of private utilities such as Massachusetts Electric and Boston Edison, however, saw changes that brought their bills closer to the low rates already enjoyed by our customers. During the first year of restructuring, Hudson took a wait-and-see attitude about opening its own borders to competition, especially in light of the November ballot question to repeal the new law. The Department deemed it prudent to allow the private utilities to work out any unexpected costs in implementation of the new law.



**In November, voters across the State voted to keep the new restructuring law on the books.**

In November, Massachusetts voters overwhelmingly supported the new restructuring law. In preparation for this new world, the Hudson Light and Power Department began drawing up specifications for a new computer system that will allow us to "unbundle" our billing into the separate parts of doing business. We have established a Rate Stabilization Trust to help protect our ratepayers from unexpected increased costs. In accordance with the new law, the Department has also established two new discounted rates for Farmers that are 10% less than our current general and industrial rates.

## **Y2K**

During 1998, the Department continued work on its Year 2000 (Y2K) Compliance Plan to maintain the reliability of our distribution service and to eliminate the potential for disruption in our day-to-day operations. This included identification of Y2K-sensitive equipment, contact with vendors, upgrading and/or replacing equipment where necessary, testing of equipment and formulation of a contingency plan.

The major areas of concern included Generation, Distribution, Transmission and Billing. The equipment at our power plant, substations and in the field that generate and bring electricity to our customers is analog and not clock sensitive. Most of the equipment and software that is Y2K sensitive involves areas that do not impact a customer's electric service, such as metering and billing. Following is a Hudson Light and Power Department Y2K Readiness Disclosure:



By the end of 1998, the HL&PD was near completion on its Y2K Compliance Plan.

### *Generation*

- We have found no equipment on our system that would cause a drop in load or customers that is Y2K sensitive.
- The metering devices that monitor purchased power and our own generated power have been tested and meet Y2K demands.

### *Distribution*

- We have found no equipment on our system that would cause a drop in load or customers that is Y2K sensitive.
- The metering devices that record customer consumption meet Y2K requirements. Some of the software that reads these devices is Y2K sensitive and was upgraded.

### *Transmission*

- Transmission of power from New England's grid is reliant on the Y2K plans of such companies as the Independent System Operator of New England (ISO). We have been monitoring the progress they have made.

### *Billing/Account Maintenance*

- The Department uses a VAX computer system for billing, etc. By the end of 1998, we were more than 98% complete in upgrading and testing the computer and software. We expect to be completed in this area by the end of March of 1999.

- All personal computers were tested and upgraded where necessary.

#### *Communications*

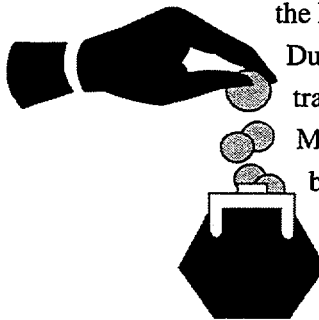
- The very uncertainty surrounding the Year 2000 requires "open-ended" planning. We have and will continue to meet and correspond with other utilities to monitor their findings regarding Y2K-critical equipment to ensure that we have dealt with every aspect possible.
- Our billing inserts will be used to keep customers abreast of Y2K developments that may impact their service.

#### *Contingency Plan*

- The Department is working on a contingency plan in case the unforeseen occurs. This includes using our own power plant to supply some electricity and having emergency crews available through December 31, 1999 into January 1, 2000.

#### *Rates Remain Stable*

During 1998, rate analyses showed Hudson Light and Power Department rates to be comparable with those offered by one of our investor-owned neighbors, Massachusetts Electric, which has the lowest rates of all the private utilities. Our rates were lower than those offered by our other investor-owned neighbor, Boston Edison.



Despite cost increases associated with transmission and stranded investment, the Department was able to maintain the status quo with rates during 1998.

During 1997, the Department saw New England Power Company (NEP) transmission bills jump by about \$1 million per year. In addition, the Massachusetts Municipal Wholesale Electric Company (MMWEC) began billing about \$800,000 annually for stranded investment as a part of its Pathway to Competition strategy (see footnotes). This MMWEC billing was suspended for one year beginning in July of 1998. We anticipate maintaining stable rates during 1999 as well.

**By taking advantage of the 10% early-payment discount every month, customers can save an average of one month's electric bill!**

One of the attractive parts of the Hudson Light and Power Department billing system is its 10% early payment discount. We discount the rate charge by 10% for accounts that are paid on or before the 10<sup>th</sup> of the month. Analyses show that a customer who takes advantage of the discount every month, in effect receives one free average month of electricity per year.

### *Stow*

The Hudson Light and Power Department and Stow Municipal Electric Department worked hard towards reconciling their differences during 1998.



After rate increases during the 1980s directly related to the delays in operation of the Seabrook Nuclear Power Plant in New Hampshire, Stow formed a study committee to look into the feasibility of leaving the Hudson Light and Power Department and forming their own municipal utility. Stow Town Meeting sanctioned the formation of the Stow Municipal Electric Department (SMED), but negotiating teams could not agree on the price tag the Town of Stow would have to pay if it left the system. At the close of 1997, the Massachusetts Supreme Judicial Court (SJC) handed down a two-part decision that basically said Stow would need to pay:

**In negotiations with Stow, our guiding principle has been to protect our customers.**

1. \$2.5 million for the Department's poles, transformers and other equipment in Stow; and
2. Stranded investment costs for investments made on Stow's behalf so that the remaining customers would not be harmed by the departure. The DTE has been ordered by the Court to establish the cost for stranded investment.

Over the years, we have had many meetings with various Stow representatives. As can only be expected, there have been differences of opinion. Despite this, we have worked hard to find an agreement that would satisfy SMED while leaving our remaining customers unharmed.

Our guiding principle has been to protect our customers. As a not-for-profit town department, we have no stockholders to pick up added costs. Our customers in Stow enjoy the same rates and service as our other customers. We do not believe it would be fair to agree to terms for Stow that would cause our remaining customers in Hudson, Berlin, Bolton, Boxboro, Marlboro, and Maynard to pay more. Our customers rely on us to make the most advantageous arrangements possible for them, and we try our best to comply regardless of where they live.

The Department has been heartened by the verbal and written support we have received from our valued customers in Stow who wish to stay on our system. We would be proud to continue the century-long tradition we have established in Stow of superb service at the most economical prices possible.



### *Office Report*

Paying bills was made easier during 1998 when the Department expanded its collection capabilities at our Main Office on Forest Avenue in Hudson. We bonded our employees and began collecting cash payments at the Main Office. Previously, only the Hudson Town Collector in the Town Hall accepted cash payments. Our readily-available parking has made the cash payment option at the Main Office particularly timely during the summer when construction in Hudson caused the Main Street to be difficult to travel. We anticipate that this new capability will also come in handy when the Hudson Town Hall renovates during 1999. Our Main Office at 49 Forest Avenue in Hudson is open Monday through Friday from 8 a.m. to 4:30 p.m. The Main Office is closed on holidays.



**A 24-hour drop-off box was installed during 1998 for the convenience of our customers.**

To accommodate those who cannot make it to the Post Office or visit us during work hours, we installed a twenty-four hour drop box at the Forest Avenue Office during 1998. Situated at the entrance to the building beneath the overhang, the drop box location keeps customers dry during inclement weather and is easily accessible. As a convenience to our customers, we have also used the drop box for other businesses, such as signing up for service, etc. To date, it has been a great success.

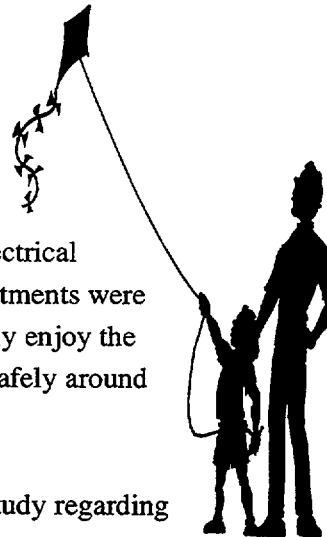
We continue to explore the possibility of offering a direct payment option to our customers. With direct payment, customers could pay their electric bills by making electronic transfers from their bank accounts. This program has been tested with some of the larger businesses, but cannot be supported on a full-scale basis with the Department's current computer system. In preparation, during 1998 we have changed all employee workstations from terminals to personal computers.

With cash now changing hands at the Office and additional personal computers installed, we increased the Department's security by adding television cameras. Our alarm system was also upgraded. To accommodate the increased traffic and to repair the existing pavement, the parking lots and roadways at 49 Forest Avenue were re-paved. The re-paving was the final step in the program to remove the Department's underground gasoline tank on Forest Avenue and to install new, more environmentally-sound aboveground tank. The new tank substantially reduces the potential for contamination due to leakage and is used to fuel the Department's vehicles.

We continued our Safety Program for students and senior citizens during 1998. Third

graders in local public and private schools were taught how to play safely around electricity and to treat the vital resource with respect.

Once again, many of the third graders sent the Department posters on electrical safety. Senior Citizens at the Hudson Senior Center and Plantation Apartments were visited with a safety program again this year. Seniors seem to particularly enjoy the forty-five minute presentation full of useful information on how to live safely around electricity.



The Department conducted a Community Network Feasibility Study regarding the possible installation of a Fiber Optic Communications Network on our distribution system that would allow us to offer our customers extended services backed by our established service reliability. The possibilities include Internet access, telephony, automated meter reading, cable television, high definition television, competitive local exchange carrier, etc. As part of our research into the viability of the project, the Department began contacting its consumers to obtain input on their current and future communication requirements. We remain interested in our customers' ideas on how we might better serve them with expanded services in the fiber optic arena. Investing in such a project would hinge upon an assessment of the benefits and liabilities involved.

**The Department continued its safety sessions for seniors and students to help them live and play safely around**

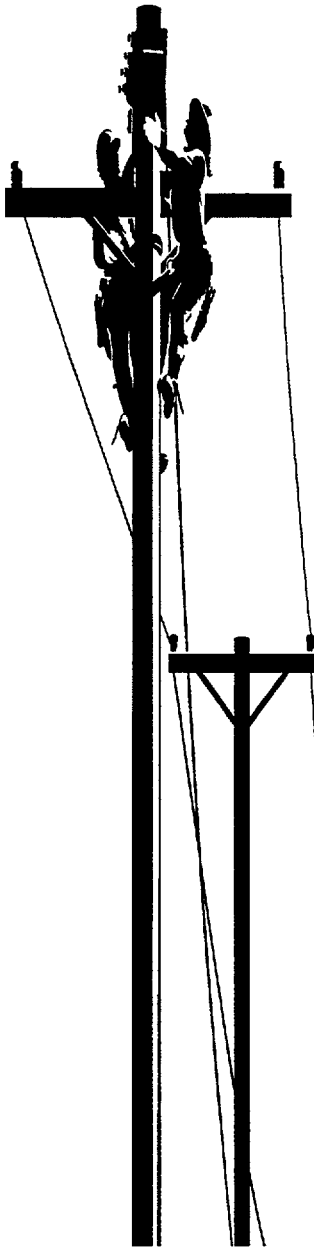
### ***Distribution Report***

Tornado warnings and severe electric storms put the area on alert during the summer of 1998, but the Hudson Light and Power Department's distribution system escaped relatively unscathed. Sporadic outages were reported when high winds felled trees and wires, and when lightning hit homes in the area. Despite the gusty, stormy summer, the Department experienced no major outages during 1998.

One of the measures of an electric utility's performance is its average service interruption time per customer. The Hudson Light and Power Department is pleased and proud to be able to boast of one of the best response teams around. Over the past few years, the average outage time in Hudson and Stow has been less than 15 minutes per customer. The national average was about 100 minutes per customer. At least one private utility in Massachusetts reportedly offers employees a bonus if they can bring the company's average interruption time per customer below 80 minutes. Restoring service in Hudson and Stow as soon as possible is a matter of pride and commitment at the Hudson Light and Power Department. More importantly, we work diligently to keep our customers' service from being interrupted in the first place.

Constant maintenance and upgrading of the system by the Linecrews ensures that service is

provided on the most reliable basis possible. Following is a summary of the activities of the Linecrews during 1998:



One measure of a utility's performance is its average outage per person record. The HL&PD record is among the best in the nation.

- Poles, wires and transformers were upgraded in Hudson on Brigham Street, Bradford Road, Brook Street, Bruen Road, Causeway Street, Chapin Road, Chestnut Street, Cottage Street, Everett Street, Forest Avenue, Gates Avenue, Giasson Street, Hosmer Street, Huron Drive, Park Street, River Street, Rutland Street, Sawyer Lane, Wilkins Street, and Wood Street; and in Stow on Crescent Street, Delaney Street, Harvard Road, Hastings Street, Maple Street, Railroad Avenue, Randall Road at the Stow Acres Country Club, Riverside Park Avenue, Samuel Prescott Way, Sudbury Road at the Massachusetts Fire Fighting Academy, and Taylor Road. The underground system on Seven Star Lane was also upgraded. The Department wishes to thank the customers of Seven Star Lane for their patience and cooperation on this job.
- New and ongoing housing developments in Hudson include Assabet Village off of Chapin Road, Brigham Hill Estates II off of Brigham Street, Cortland Drive off of Hosmer Street, Danforth Woods off of Laurel Drive, Mallard Estates off of Manning Street, Princeton Circle off of Bellevue Street and The Pasture off of Ruthellen Road; and in Stow include Deerfield Lane, Heritage Estates off of White Pond Road, Lands End off of Bradley Lane, two new subdivisions off of Maple Street, Wetherbee Lane off of South Acton Road, Woodman Place and Zander Way. The Department also worked at the new Sauta Field in Hudson for the concession stand.
- New three-phase transformers and transformer banks were installed or upgraded in Hudson at the Bonazzoli buildings on Sawyer Lane, Carmela A. Farley School on Cottage Street, the Hudson Light and Power Department Power Station's new aeration system on Cherry Street, Larkin Lumber on Main Street, McKeown Masonry on Bonazzoli Avenue, Terra Drilling on Main Street, and Washco Company on Giasson Street; and in Stow at Juniper Hills water well off of Circuit Drive and the Massachusetts Fire Fighting Academy on Sudbury Road.

### *Power Station Report*

With environmental concerns in mind, the Department upgraded its oil recovery system at the Power Station on Cherry Street during 1998. The final steps of the site clean-up project were taken when a Dual-Phase Extraction system was installed at the plant. The system will be used to remove small amounts of oil that leaked into the ground from a minute hole in the old piping. All underground fuel oil piping was removed. New fuel piping was installed inside the plant, while double-walled underground pipes were laid from the day tanks to the plant. During 1998, these tanks received some 92,000 gallons of #2 transportation grade fuel oil and 3,000 gallons of #40 lube oil. The security of these structures remains a priority to the Department. The day tanks and all underground fuel and lube oil lines were tested and passed. In related activity, a new oil containment structure was placed around the 8,300-volt transformers outside the power station.

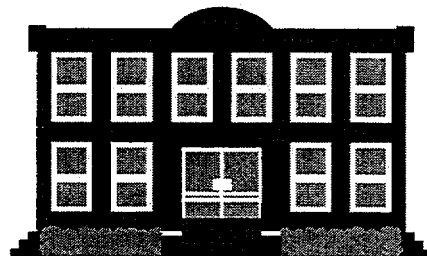
The power plant has always been a popular educational stop for many local youngsters. Numerous scouting and school groups have taken advantage of our employees' expertise and have visited the plant to see the oil and gas-fired engines in operation. The tours are tailored to the age of the visiting youngsters.

Personnel at the power station are not only capable of guiding youngsters through the mechanics of its operations, but are also trained in helping our customers with emergency problems. The Hudson Light and Power Department is unique from many other electric companies in that customers with problems are able to reach an employee 24-hours a day, seven days a week. The power station is staffed around the clock and is used as an after-hour emergency dispatch for customers with problems.

The power station on Cherry Street remains a vital part of the Department's power supply mix. Its existence allows us to participate in ISO's economy exchange. As a member, we only need to run our own engines when all lesser expensive sources of power in New England are exhausted. This is not only cost-effective, but also helps reduce wear and tear on our own equipment. At the close of 1999, the power station will be a vital asset for the Department in the unlikely event that New England's electric grid shuts down. The station has what is known as "black start" capabilities, meaning that the engines can be started up when there is no electricity available.

Because of its importance to the system, the plant is the focus of constant maintenance to ensure that its engines run in top condition. Following is a summary of the work performed on the engines during 1998:

- #7 Engine: Opacity monitors were cleaned and calibrated monthly. Filter material in lube oil



The Power Station's free tours continues to draw a number of local students and scouting troops.

purifiers was changed. Crankshaft deflection readings were taken and recorded. Jacket water and lube oil heat exchangers were cleaned. All control linkage on the engine was serviced. The traveling air screen intake system was serviced. Summer and winter capability audits were performed. The fuel cam timing was checked. The fuel oil meter was cleaned. Repairs were done on the roof around the exhaust silencer. Peak firing pressures were taken on the engine.

- **#8 Engine:** Opacity monitors were cleaned and calibrated monthly. We replaced the # 3 cylinder gas valve because of a water leak. The jacket water and lube oil heat exchangers were cleaned. A bad fuel nozzle on the # 1 cylinder was replaced. We serviced the traveling air screens and cleaned the fuel oil heat exchanger. A cracked cylinder head on the #3 cylinder was replaced with a spare. Summer and winter capability audits were performed. The fuel cam timing was checked.
- **#9 Engine:** The nut and bolt strainer was cleaned. The engine was jacked and leveled to optimize crankshaft deflection. Rod and bearing clearances were taken. A re-chromed wrist pin was installed into the # 6 cylinder. Lube oil purifier filters were changed. Jacket water and lube oil heat exchangers were cleaned. A lower liner gland water leak on the # 1 cylinder water leak was repaired. We checked the fuel cam timing. Zinc plugs on the engine block were replaced. Summer and winter capability audits were performed. We pulled the # 5 cylinder liner to repair a water leak. The lube oil tank was cleaned and filled with new oil.
- **#10 Engine:** We replaced the aboveground fuel piping from the day tank to the engines. The oil in the fan house gearbox and generator bearing was changed. We changed the "O" rings on the gas jumpers and cleaned the engine nut and bolt strainers. Summer and winter capability audits were performed. The fuel cam timing was checked. The fuel linkage was also checked and all the auxiliaries were greased.
- **#11 Engine:** We replaced all gaskets on the gas header. The oil on the fan house gearbox and generator bearing was changed. A leak on the fan house radiator was fixed. We replaced a broken universal and yoke on the fan drive shaft and a broken oil line to the pressure gauge. The engine nut and bolt strainer was cleaned. Summer and winter capability audits were performed. The fuel cam timing was checked. The fuel oil header inside the engine was repaired.
- **#12 Engine:** We removed the # 3 cylinder left bank cylinder head and replaced

it with a spare. The head was reconditioned. All fuel nozzles were tested. We also checked the fuel boxes lift and duration on the pilot fuel. Jacket water and lube oil heat exchangers were cleaned. Deflection readings were taken on engine crankshaft. A spare cylinder head was rebuilt with new exhaust valves and seats. The lube oil bypass valve was removed and cleaned. Summer and winter capability audits were performed. The "O" ring on the high-pressure fuel pump left bank was replaced. The air regulator for safety shut down was also replaced.

In other actions by Power Station personnel during 1998:

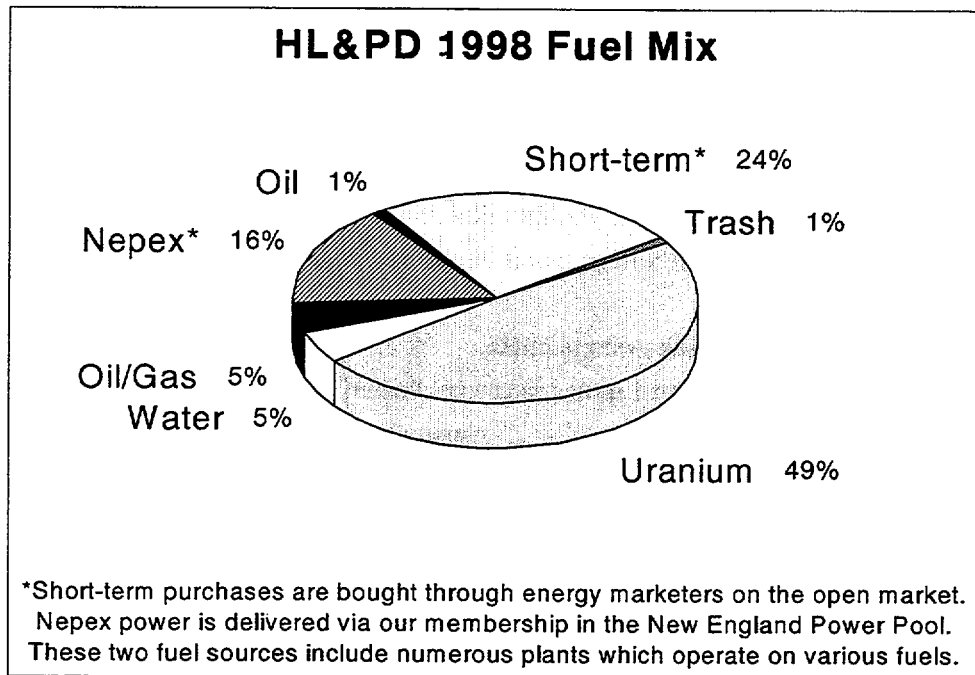
- Water treatment tests on engines and the cooling tower were performed monthly.
- A new fuel oil temperature gauge was installed on the fuel oil day tank.
- All department fire extinguishers were tested by Keane fire service.
- All rubber transition hoses were replaced on the outside fuel oil system.
- Techna Test Inc. tested day tanks # 1 and # 2 and all underground fuel and lube oil lines. The equipment passed the tests.
- Opacity testing using USEPA method # 9 as ordered by the Department of Environmental Protection was performed on all engines.
- A 5% system-wide voltage reduction test was performed.
- Three new voltage recorders were installed in the Forest Avenue substations.
- Infrared testing on high voltage connections was done in plant switchgear and outside structures.
- Fuel oil and lube oil tanks were painted.
- The Quincy air compressor in the plant was cleaned and serviced.
- We received 92,000 gallons of # 2 transportation grade fuel oil and 3000 gallons of # 40 lube oil.
- Metal anchor poles by the Fire Station and Hudson Catholic High School were painted.

In addition to our own generating plant on Cherry Street and our participation in ISO, the Department purchases electric power from the following sources:

- *Oil-Fired Units* - W. F. Wyman, located in Yarmouth, Maine and operated by Central Maine Power.

- *Oil and Gas-Fired Units* - Cleary No. 9 located in Taunton, Massachusetts and operated by the Taunton Municipal Light Plant; and Peabody Municipal Lighting Plant located in Peabody, Massachusetts.
- *Hydro-Electric Units* - Niagara River, located in Niagara Falls, New York and operated by the Power Authority of the State of New York; and Hydro Quebec, located in Quebec, Canada and operated by Hydro Quebec.
- *Trash-Fired Units* - Refuse Fuels Associates, located in Lawrence, Massachusetts and operated by Refuse Fuels Associates.
- *Uranium-Fueled Units* - Seabrook Nuclear Power Plant, located in Seabrook, N.H. and operated by North Atlantic Energy Services Corporation; Millstone III, located in Waterford, Connecticut and operated by North Atlantic Energy Service Corporation; Pilgrim I, located in Plymouth, Massachusetts and operated by Boston Edison; and Vermont Yankee, located in Vernon, Vermont and operated by Vermont Yankee.

Following is a pie chart showing the Hudson Light and Power Department's 1998 fuel mix:



In 1998, MMWEC began negotiations to buy out a power contract with Refuse Fuels Associates in which the Department participates. The move came after cost for the energy generated from burning trash rose to more than 9.5 cents per kilowatt-hour. By June of 1998, an agreement had been reached that should save 17 municipal light departments about \$8 million in avoided costs.

With various New England power plants shut down during 1998, the Northeast once again feared tight power supplies during the summer. The Independent System Operator of New England (ISO) and utilities kept a close watch on the situation, while local businesses and municipal departments agreed to help out by reducing load if supplies became low. For about an hour on June 26<sup>th</sup>, participants in our Voluntary Load Curtailment program were asked to reduce their electric consumption in order to help New England avert more drastic measures. Our thanks go out to those who offered to be of assistance if the need had arisen: Assabet Valley Regional Vocational School, Assabet Machine Corporation, Boyd Coating, Compaq, Digital Equipment Corporation, Intel of Massachusetts, Lund International, Specialized Plastics, Test Devices, Town of Hudson and Town of Stow.

One power plant that was unavailable to New England was Maine Yankee. Some 29 municipal light departments in New England, including Hudson, challenged Maine Yankee Atomic Power Company over its August, 1997 shutdown of the Maine Yankee nuclear power plant. Utilities called the shutdown imprudent, claimed the owners did not take into consideration all the costs the shutdown would have on customers, and called the action a breach of contract. Hudson has a 0.1487% share in Maine Yankee. By February of 1999, an agreement was reached that would cap utilities' costs related to Maine Yankee. The settlement hinges upon approval from the Federal Energy Regulatory Commission (FERC).

Another non-operative plant that was the focus of legal action during 1998 was Millstone III. MMWEC joined eight other utilities in filing suit against Northeast Utilities, demanding compensation and charging negligence in connection with the shutdown of its Millstone III power plant. The Department is contracted to buy power from Millstone III through MMWEC. After being shut down for more than two years, the plant came back on line during the summer of 1998.

#### *A Personal Note*

I would like to take the opportunity to thank the men and women of the Hudson Light and Power Department. Their skill and commitment to our customers has continued the Department's long-standing tradition of offering unparalleled service. My appreciation is also extended to the Hudson Municipal Light Board for their continued guidance and support. In the following pages are the 1998 Financial Statistics of the Hudson Light and Power Department.

Respectfully submitted,

*Anthony J. Monteiro, Manager*



# ***Financial Statements Definitions***

Under the **Cash Basis of Accounting**, revenue is recognized only when cash is received; expenses are recorded only when they are paid in cash. Under this method the determination of income rests upon the collection of revenues for services or products rendered. Expenses are incurred upon the actual payment of cash for products or services received. This type of accounting is seldom found in practice and financial statements which could be prepared on this basis do not reflect the financial position or operating results of a business in conformity with generally accepted accounting principles.

Under the **Accrual Basis of Accounting**, revenue is recognized when it is realized and expenses are recognized when incurred, without regard to the time of receipt of payment. The focus of accrual accounting is on the realization of revenue, the incurrence of costs, and the matching of revenue with costs incurred. This "matching" concept requires that the cost incurred to create revenues be accounted for at the same time. Consequently, if revenue is accounted for during a period, the "matching" costs must be accounted for even if it requires an estimation of these costs.

**Balance Sheet:** A Balance Sheet is a concise statement of the assets, liabilities and equity of a business as of a given date.

**Assets:** Anything owned that has money value or utility is an Asset. Assets are divided into plant or Property Assets, Current Assets, or Other Assets. Property Assets are buildings, generation equipment, transmission equipment, distribution equipment, etc. in use. Construction Work In Progress is Plant Under Construction which has not been completed as of the date of the statement. Current Assets are cash, receivables, inventories of generation fuel, gasoline, lube oil, poles, etc., prepayments, unbilled utility revenues and other miscellaneous assets. Deferred Assets represents expenditures for preliminary surveys, plans, investigations made for the purpose of determining the feasibility of utility projects under consideration.

**Liabilities:** Liabilities consist of debts outstanding (unpaid bills) and in the process of accruing. They are usually classified as to Current Liabilities, Deferred Liabilities, or Long Term Debt.

**Current Liabilities** are Short Term Liabilities: They generally consist of obligations which are to be liquidated within a year from the balance sheet date and include amounts accrued to date or those liabilities which accumulate from day to day. The most common Current Liabilities are accounts payable (bills owed as of a specific date), accrued salaries and wages, accrued interest, etc.

**Deferred Liabilities:** Advance billings for services rendered, etc.

**Long Term Debt:** Debts incurred through borrowing such as bonds and notes or other financial obligations which are payable over a long period of time.

**Equity:** The amounts paid on loans over the Department's existence, moneys invested by the Town in the Department, the earnings retained in the Department as represented by property.

**Income Statement:** An Income Statement is a report in summary form of the revenue earned by a particular business during a specified period, together with the related costs and expenses and the losses for that same period and the resulting net income (or net loss).

# Comparative Balance Sheet Assets

	1998	1997	Increase (Decrease)
<b>Electric Utility Plant (Net)...</b>			
Intangible Plant	\$ 3,879.76	\$ 3,879.76	\$ 0.00
Production Plant in Service	1,797,335.55	1,996,543.01	(199,207.46)
Nuclear Fuel	59,162.15	53,538.12	5,624.03
Transmission Plant in Service	186,323.97	199,518.39	(13,194.42)
Distribution Plant in Service	3,262,486.00	3,107,402.98	155,083.02
General Plant in Service	<u>675,588.30</u>	<u>604,385.60</u>	<u>71,202.70</u>
<b>Total Utility Plant In Service</b>	<b>\$ 5,984,775.73</b>	<b>\$ 5,965,267.86</b>	<b>\$ 19,507.87</b>
<b>Other Property &amp; Investments...</b>			
Investments in Assoc. Companies	\$ 115,983.02	\$ 131,453.25	\$ (15,470.23)
Other Investments	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
	<b>\$ 115,983.02</b>	<b>\$ 131,453.25</b>	<b>\$ (15,470.23)</b>
<b>Cash Assets...</b>			
Operation Cash	\$ 5,043,593.24	\$ 2,761,232.58	\$ 2,282,360.66
Miscellaneous Cash	208,206.36	221,634.26	(13,427.90)
Depreciation Fund	86,029.40	212,554.06	(126,524.66)
Depreciation Fund Investment	3,645,208.70	3,036,068.74	609,139.96
Insurance Escrow Reserve	0.00	0.00	0.00
Escrow Reserve Maine Yankee	280,957.80	92,791.00	188,166.80
Petty Cash	500.00	500.00	0.00
Deposit Interest Account	134,199.57	115,334.39	18,865.18
Customer Deposits Account	<u>247,138.09</u>	<u>271,585.86</u>	<u>(24,447.77)</u>
<b>Total Cash Balances</b>	<b>\$ 9,645,833.16</b>	<b>\$ 6,711,700.89</b>	<b>\$ 2,934,132.27</b>
<b>Other Current and Accrued Assets...</b>			
Customer Account Receivables	\$ 2,749,543.63	\$ 2,766,591.62	\$ (17,047.99)
Other Accounts Receivables	211,499.01	195,337.44	16,161.57
Material and Supplies	754,718.03	1,000,290.83	(245,572.80)
Prepayments	496,241.57	2,042,844.51	(1,546,602.94)
Int. & Dividends Receivable	0.00	9,598.45	(9,598.45)
Accrued Utility Revenues	229,704.77	412,169.25	(182,464.48)
Misc. Current & Accrued Assets	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
<b>Total Other Current &amp; Accrued Assets</b>	<b>\$ 4,441,707.01</b>	<b>\$ 6,426,832.10</b>	<b>\$ (1,985,125.09)</b>
<b>Deferred Assets...</b>			
Preliminary Survey Charges	\$ 0.00	\$ 0.00	\$ 0.00
Misc. Deferred Debits	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
<b>Total Deferred Assets</b>	<b>\$ 0.00</b>	<b>\$ 0.00</b>	<b>\$ 0.00</b>
<b>Total Assets</b>	<b><u>\$ 20,188,298.92</u></b>	<b><u>\$ 19,235,254.10</u></b>	<b><u>\$ 953,044.82</u></b>

## Equity and Liabilities

Equity...	1998	1997	Increase (Decrease)
Loans Repayment	\$ 1,925,000.00	\$ 1,925,000.00	\$ 0.00
Invested by Town	20,093.39	20,093.39	0.00
Retained Earnings	<u>14,651,478.75</u>	<u>14,473,237.49</u>	<u>178,241.26</u>
<b>Total</b>	<b>\$ 16,596,572.14</b>	<b>\$ 16,418,330.88</b>	<b>\$ 178,241.26</b>
<b>Current &amp; Accrued Liabilities...</b>			
Accounts Payable	\$ 2,004,236.39	\$ 1,365,609.52	\$ 638,626.87
Customer Deposits	247,228.09	271,585.86	(24,357.77)
Customer Deposits-Interest	133,436.44	114,571.26	18,865.18
Tax Collections Payable	15,779.29	16,465.15	(685.86)
Misc. Current & Accrued Liabilities	172,100.11	29,744.97	142,355.14
Customer Advances for Construction	<u>2,100.00</u>	<u>2,100.00</u>	<u>0.00</u>
<b>Total Current &amp; Accrued Liabilities</b>	<b>\$ 2,574,880.32</b>	<b>\$ 1,800,076.76</b>	<b>\$ 774,803.56</b>
<b>Deferred Credits...</b>			
Misc. Deferred Credits	\$ 2,792.73	\$ 2,792.73	\$ 0.00
Deferred Credit-Fuel Charge	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>
<b>Total Deferred Credits</b>	<b>\$ 2,792.73</b>	<b>\$ 2,792.73</b>	<b>\$ 0.00</b>
<b>Reserves...</b>			
Injuries and Damages Reserve	\$ 605,394.41	\$ 605,394.41	\$ 0.00
<b>Total Reserves</b>	<b>\$ 605,394.41</b>	<b>\$ 605,394.41</b>	<b>\$ 0.00</b>
<b>Contributions in aid of Construction...</b>			
	\$ 408,659.32	\$ 408,659.32	\$ 0.00
	<u>\$ 408,659.32</u>	<u>\$ 408,659.32</u>	<u>\$ 0.00</u>
<b>Total Equity &amp; Liabilities</b>	<b><u>\$ 20,188,298.92</u></b>	<b><u>\$ 19,235,254.10</u></b>	<b><u>\$ 953,044.82</u></b>

## Statement of Equity

Retained Earnings at January 1, 1998	\$ 14,473,237.49
Net Income or (Loss)	599,701.69
Miscellaneous Credits to Retained Earnings	<u>54,828.77</u>
<b>Total</b>	<b>\$ 15,127,767.95</b>
Appropriation of Retained Earnings Returned to Town	\$ 225,000.00
Miscellaneous Debits to Retained Earnings	<u>251,289.20</u>
<b>Total</b>	<b>\$ 476,289.20</b>
<b>Total Retained Earnings at December 31, 1998</b>	<b><u>\$ 14,651,478.75</u></b>

# Comparative Income Statement Operating Statement

	1998	1997	Increase (Decrease)
<b>Operating Revenue</b>	\$ 27,374,302.23	\$ 27,752,130.70	\$ (377,828.47)
<b>Operating Expense...</b>			
Production	\$ 621,334.80	\$ 645,572.80	\$ (24,238.00)
Purchased Power Expense	22,010,629.30	22,760,781.36	(750,152.06)
Transmission Expenses	1,743,706.44	1,508,227.53	235,478.91
Distribution Expenses	603,498.43	586,277.00	17,221.43
General Expenses	1,442,637.92	1,496,057.71	(53,419.79)
Depreciation	604,299.21	596,991.67	7,307.54
Taxes	25,130.60	26,498.00	(1,367.40)
<b>Total Operating Expenses</b>	\$ 27,051,236.70	\$ 27,620,406.07	\$ (569,169.37)
<b>Net Operating Revenues</b>	\$ 323,065.53	\$ 131,724.63	\$ 191,340.90
<b>Other Income...</b>			
Income From Contract Work	\$ 0.00	\$ 0.00	\$ 0.00
Interest & Dividend Income	277,000.56	318,659.15	(41,658.59)
Misc. Nonoperating Income	4.96	9,610.10	(9,605.14)
<b>Total Other Income</b>	\$ 277,005.52	\$ 328,269.25	\$ (51,263.73)
<b>Miscellaneous Income Deductions...</b>			
Other Income Deductions	\$ 304.92	\$ 145.51	\$ 159.41
<b>Total Income Deductions</b>	\$ 304.92	\$ 145.51	\$ 159.41
<b>Inc. Before Interest Charges</b>	\$ 599,766.13	\$ 459,848.37	\$ 139,917.76
<b>Interest Charges...</b>			
Other Interest Expense	\$ 64.44	\$ 88.06	\$ (23.62)
<b>Total Interest Charges</b>	\$ 64.44	\$ 88.06	\$ (23.62)
<b>Net Income Before</b>			
Return to Town	\$ 599,701.69	\$ 459,760.31	\$ 139,941.38
Less Return to Town	225,000.00	225,000.00	0.00
<b>Net Income (Loss)</b>	<u>\$ 374,701.69</u>	<u>\$ 234,760.31</u>	<u>\$ 139,941.38</u>

# Income Statement Detail Expenses

January 1, 1998 to December 31, 1998

## Production

### Nuclear Power Generation

Operation Supervision	\$ 19,011.36
Fuel	28,468.51
Coolants and Water	1,556.06
Steam Expenses	9,582.59
Electric Expenses	3,201.45
Miscellaneous Nuclear Power Expenses	29,007.81
Maintenance Supervision	7,812.76
Maintenance of Structures	6,111.56
Maintenance of Reactor Plant Equipment	7,507.80
Maintenance of Electric Plant	8,448.86
Maintenance of Miscellaneous Nuclear Power	468.04
<b>Total Nuclear Power Production Expenses</b>	<b>\$ 121,176.80</b>

### Other Power Generation...

Operation Supervision	\$ 29,376.30
Fuel Oil	52,699.26
Fuel Natural Gas	76,182.78
Generation Expense	68,606.74
Generation Expense-Lube	10,803.10
Miscellaneous Other Power Generation Expenses	72,684.27
Maintenance Supervision	27,962.59
Maintenance of Structures	78,892.49
Maintenance of Generation and Electric Plant	82,857.42
Maintenance of Miscellaneous Generation Plant	93.05
<b>Total Other Production Expenses</b>	<b>\$ 500,158.00</b>

### Purchased Power Expenses...

Purchased Power-Entitlement	\$ 20,473,013.00
Purchased Power-Nepex	1,504,143.48
System Control and Load Dispersion	13,842.85
Other Expenses Purchase Power	19,629.97
<b>Total Purchased Power</b>	<b>\$ 22,010,629.30</b>

### Distribution Expenses...

Operation Supervision and Engineering	\$ 30,972.86
Station Expenses	120,013.41
Overhead Line Expenses	7,236.89
Underground Line Expenses	82.60
Street Lighting & Signal Expenses	7,746.63

# **Income Statement Detail Expenses**

**January 1, 1998 to December 31, 1998**

## **Distribution Expenses (continued)...**

Meter Expenses	79,162.13
Customer Installation Expense	3,879.96
Miscellaneous Distribution Expenses	11,115.79
Maintenance of Supervision and Engineering	31,129.21
Maintenance of Station Equipment	1,220.99
Maintenance of Overhead Lines	230,345.94
Maintenance of Underground Line	43,029.32
Maintenance of Line Transformer	27,006.62
Maintenance of Street Lighting	10,240.56
Maintenance of Meters	1,105.36
Maintenance of Miscellaneous Distribution Plant	(789.84)

**Total Distribution Expenses** \$ 603,498.43

**Transmission Expense** \$ 1,743,706.44

## **General...**

Supervision	\$ 13,433.16
Meter Reader Expenses	52,677.72
Customer Records and Collection Expenses	240,932.09
Advertising Expense	478.22
Miscellaneous Sales Expense (RCS)	8,363.27
Administrative and General Salaries	332,076.89
Office Supplies and Expenses	19,100.24
Administrative Expenses Transferred	0.00
Outside Services Employed	133,137.78
Property Insurance	66,601.18
Injuries and Damages	20,428.79
Employee Pension and Benefits	415,739.41
Regulatory Commission Expenses	0.75
General Advertising Expense	3,068.08
Miscellaneous General Expenses	44,710.36
Maintenance of General Plant	55,133.15
Transportation Expenses	36,756.83
Depreciation Expense	604,299.21

**Total General and Depreciation Expenses** \$ 2,046,937.13

**Real Estate and Other Taxes** \$ 25,130.60

**Total Operation Expenses** \$ 27,051,236.70

# Income Statement Detail

## Operating Revenue

January 1, 1998 to December 31, 1998

Sales to Residential Consumers	\$ 6,519,812.62
Sales to Commercial Consumers	1,583,285.48
Sales to Power Consumers	12,593,499.42
Private Property Lighting Sales	80,220.14
<b>Municipal Sales...</b>	
Hudson Street Lights	94,160.30
Hudson Municipal Buildings	67,256.40
Hudson Municipal Power	346,460.21
All Electric Municipal Buildings	393,279.00
Stow & Berlin Street Lights	5,238.03
Stow, Maynard & Other Municipal Service	116,762.77
Sales for Resale	0.00
<b>Total Revenue from Sales of Electricity</b>	<b>\$ 21,799,974.37</b>
<b>Power Adjustment Charges...</b>	
Residential Sales	\$ 871,349.99
Commercial Sales	314,464.72
Power Sales	4,324,273.73
Private Property Lighting	12,795.08
<b>Municipal Power Adjustment Charges...</b>	
Street Lighting Stow et al	775.47
Municipal Power Hudson	93,632.36
Municipal Commercial Hudson	13,561.72
Municipal Power Stow et al	26,412.80
Municipal Commercial Stow et al	2,668.71
Municipal All Electric	61,517.08
Miscellaneous Electric Sales	0.00
<b>Total Power Adjustment Charges</b>	<b>\$ 5,721,451.66</b>
<b>Other Income...</b>	
Other Electric Revenues (RCS, etc.)	\$ 35,340.68
<b>Total Income</b>	<b><u>\$ 27,556,766.71</u></b>

# Statement of Changes in Financial Position

## Funds were provided from ...

### Operations ...

Net Income	\$ 599,701.69
Miscellaneous Credits to Surplus	54,828.77
Return of Investment	<u>15,470.23</u>

<b>Total Funds Provided</b>	<b>\$ 670,000.69</b>
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## Funds were used for ...

Increase (Decrease) to Utility Plant	\$ 19,507.87
Miscellaneous Debits to Surplus	251,289.20
Return to Town of Hudson	225,000.00
Decrease (Increase) in Deferred Credits	<u>0.00</u>

<b>Total</b>	<b>\$ 495,797.07</b>
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<b>Increase (Decrease) in Working Capital</b>	<b>\$ <u>174,203.62</u></b>
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## Increase (Decrease) in Working Capital Represented by ...

Cash	\$ 2,939,624.86
Receivables	(886.42)
Materials and Supplies	(245,572.80)
Prepayments	(1,546,602.94)
Interest Receivable	(9,598.45)
Accrued Utility Revenues	(182,464.48)
Miscellaneous Deferred Debits	0.00
Miscellaneous Accrued Liabilities	(142,355.14)
Accounts Payable	(638,626.87)
Taxes Payable	<u>685.86</u>

<b>Total</b>	<b>\$ <u>174,203.62</u></b>
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## **Footnote to Financial Statements**

The Hudson Light and Power Department's accounting policies are in conformity with generally accepted accounting principals and conform to the uniform system of accounts prescribed for Public Utilities by the Federal Energy Regulatory Commission as modified by the Massachusetts Department of Public Utilities for municipal owned lighting plants.

**Revenues** are computed on the basis of monthly billings to customers. Unbilled revenues from the sale of energy are not accrued as of the end of the calendar year. Miscellaneous electric sales adjustment is for over-billed or under-billed power adjustment charges.

**Electric Utility Plant Assets** are stated at cost. The provision for depreciation is determined by the straight-line method based on a 3% annual depreciation rate. The cost of maintenance and repairs is expensed as incurred; renewals, replacements and betterments are capitalized.

**Preliminary Survey Charges (Deferred Assets)** incurred for proposed projects through MMWEC are deferred pending bonding of the proposed facility. Funds relating to MMWEC projects are refunded to the Department after bonding. Charges relating to projects, which are undertaken by the Department, are transferred to construction work in progress and eventually to utility plant on completion. Projects abandoned by MMWEC or the Department are charged to expense.

Projects started but not completed are charged to **Construction Work In Progress**. Any project abandoned is charged directly to retained earnings.

**Investments** of the Depreciation Fund are in Certificates of Deposit in the State banking system as prescribed by law. Further, interest earned on these funds can only be used in the same manner as depreciation funds as prescribed by the Massachusetts General Laws.

**Inventories:** Cost of materials and supplies are valued at average cost on the First-In, First-Out basis (FIFO). Cost of fuel is based on average cost.

**Segregated Funds:** The Depreciation Fund is restricted to additions and replacements of plant, property and equipment under the General Laws of the Commonwealth of Massachusetts and regulations of state agencies.

During 1984 the Department set up an Insurance **Escrow Account** to self-insure for conditions that the Department may encounter in its day to day operations.

**Pensions:** The Department's employees are members of the Middlesex County Retirement System. The Municipal Light Board has established the Hudson Municipal Light Department Employee's Retirement Trust to reimburse the Town of Hudson for retirement costs of its employees. This fund is maintained by the transfer of funds from the Department to the Trust based on actuarial studies performed by a professional actuarial consultant. An amount equal to \$96,083.95 was transferred to the fund.

**Commitments and Contingencies:** The Hudson Light and Power Department has purchase contracts with the following sponsor companies and receives kilowatt-hour amounts from the entitlements listed:

	Yearly Cost	Energy kWh
Pasny- Niagara River	\$ 139,472.13	16,282,382
Vermont Yankee- Yankee Atomic	217,116.97	3,734,865
Maine Yankee- Yankee Atomic	179,841.90	0
Central Maine Power- Wyman	184,023.74	3,654,148
Boston Edison- Pilgrim #1	1,271,921.41	21,262,493
MMWEC - Nuclear Mix #1	612,304.86	2,330,718
MMWEC -Millstone #3	420,600.38	1,751,911
MMWEC- Seabrook #4	1,285,804.49	15,374,522
MMWEC- Seabrook #5	161,608.86	1,712,376
MMWEC- Seabrook #6	12,024,823.57	116,422,618
Central Vermont Public Services	2,850,614.62	76,386,254
Taunton - Cleary #9	543,396.53	5,056,370
RFA- Refuse Fuel	441,936.28	3,096,969
Enron Power Marketing Inc.	120,946.50	4,133,000
P G & E Energy	8,568.00	48,000
Peabody Municipal Light Plant	15,750.00	240,000
Connecticut Municipal Electric Energy Cooperative	36,441.00	1,132,000
	<u>\$ 20,515,171.24</u>	<u>272,618,626</u>
 New England Power Exchange	 <u>1,510,790.78</u>	 <u>52,060,500</u>
	<u>\$ - 22,025,962.02</u>	<u>324,679,126</u>
 True Up for 1997 Purchases	 <u>\$ 1,080.00</u>	 <u>32,000</u>

Hudson obtains 890 kW of Seabrook Unit #1 on a direct ownership basis, for which the Department uses 100% equity financing. Hudson's ownership share of Seabrook Unit #1 is 0.07737%. On June 30, 1990, Seabrook was declared operational. Under the Joint Ownership Agreement, the joint owners are obligated to pay their pro rata share of Seabrook's operating cost. In addition, should any other joint owner fail to make any payment, the other owners may be required to increase their payments and correspondingly their equivalent percentage ownership of Seabrook capacity.

The Town of Hudson, acting through its Light Department, is a Participant in certain Projects of the Massachusetts Municipal Wholesale Electric Company (MMWEC).

MMWEC is a public corporation and a political subdivision of the Commonwealth of Massachusetts, created as a means to develop a bulk power supply for its Members and other utilities. MMWEC is authorized to construct, own or purchase ownership interests in and to issue revenue bonds to finance electric facilities (Projects). MMWEC has acquired ownership interests in electric facilities operated by other utilities and also owns and operates its own electric facilities. MMWEC sells all of the capability (Project Capability) of each of its Projects to its Members and other Utilities (Project Participants) under Power Sales Agreements (PSAs).

Among other things, the PSAs require each Project Participant to pay its pro rata share of MMWEC's costs related to the Project, which costs include debt service on bonds issued by MMWEC to finance the Project, plus 10% of MMWEC's debt service to be paid into a Reserve and Contingency Fund. In addition, should any Project Participant fail to make payment, other Project Participants may be required to increase (step-up) their payments and correspondingly their Participants' share of Project Capability to an additional amount not to exceed 25% of their original Participants' share of the Project Capability. Project Participants have covenanted to tax, revise, and collect rates at least sufficient to meet their obligations under the PSAs.

MMWEC also contracts to purchase power from third parties, which is resold to Members and other utilities under agreements known as Power Purchase Agreements (PPAs).

The payments required to be made to MMWEC under the PSAs and the PPAs are payable solely from Light Department revenues. Under the PSAs, each Participant is unconditionally obligated to make payments due to MMWEC whether or not the Project(s) is completed or operating and notwithstanding the suspension or interruption of the output of the Project(s).

MMWEC operates the Stony Brook Intermediate Project and the Stony Brook Peaking Project fossil-fueled power plants. MMWEC has a 22.7 MW interest in the W.F. Wyman Unit No. 4 plant, operated by Central Maine Power Company (CMP). In January 1998, CMP agreed, subject to Maine Public Utilities Commission approval, to sell its power plants to Florida Power & Light, which includes CMP's 59% share of W.F. Wyman Unit No. 4 for which it is the lead owner.

MMWEC's 11.6% ownership interest in the Seabrook Station nuclear generating unit represents a substantial portion of its plant investment and financing program. In addition, MMWEC has a 4.8% ownership interest in the Millstone Unit 3 nuclear unit.

The MMWEC Seabrook and Millstone Project Participants, per the PSAs, are liable for their proportionate share of the costs of a nuclear incident at those power plants as outlined in the Price-Andersen Act. The Project Participants are also liable for the decommissioning expenses, which are being funded through monthly Project billings.

In November 1997, the Commonwealth of Massachusetts enacted legislation effective March 1, 1998 to restructure the electric utility industry. MMWEC and the municipal light departments are not specifically subject to the legislation. However, it is management's belief that industry restructuring and customer choice promulgated within the legislation will have an effect on MMWEC and the Participants' operations.

In anticipation of the electric utility deregulation, MMWEC adopted a Pathway to Competition strategy in 1997 which provides for the billing of amounts in advance of their scheduled due dates for the purpose of paying when due, certain of MMWEC's outstanding bonds. The Hudson Light and Power Department has paid \$1,339,574 to MMWEC under the Pathway to Competition strategy, which is going to be utilized by MMWEC to satisfy the debt obligation noted in the schedules relating to Hudson Light and Power Department's Power Sales Agreements. In June 1998, the MMWEC Board of Directors voted to suspend for one year, commencing with the July 1998 billing, the Pathway to Competition billings with the condition that during that one year, MMWEC and its Project Participants will work jointly to address stranded costs; and to re-institute its Pathway to Competition billings at the conclusion of the one-year suspension.

MMWEC had a Power Purchase Contract with Refuse Fuels Associates (RFA), pursuant to which MMWEC had agreed to purchase electric capacity and output for resale to certain cities and towns of the Commonwealth having municipal electric departments, and had entered into a PPA with certain Light Departments. MMWEC and the municipal light departments have determined that the purchase by MMWEC of the capacity and output pursuant to the Power Purchase Contract was not economical and MMWEC bought out and terminated the RFA contract. MMWEC negotiated the payment of \$22,000,000 for the buy-out and termination of the Power Purchase Contract and MMWEC financed the payment through the issuance of \$22,500,000 in commercial paper notes. The Light Department's proportionate share of the debt liability associated with the contract buyout is included in amounts noted below.

MMWEC is involved in various legal actions. In the opinion of management, the outcome of such litigation or claims will have a material adverse effect on the financial position of the company.

As of December 31, 1998, total capital expenditures amounted to \$1,479,419,000, of which \$161,898,000 represents the amount associated with the Department's Project Capability. MMWEC's debt outstanding for the Projects and PPA included Power Supply System Revenue Bonds and commercial paper notes totaling \$1,222,735,000, of which \$128,846,000 is associated with the Department's share of Project Capability and PPA. As of December 31, 1998, MMWEC's total future debt service requirement on outstanding bonds issued for Projects and commercial paper notes for the PPA is \$1,936,734,000, of which \$216,097,000 is anticipated to be billed to the Department.

The Hudson Light and Power Department has entered into PSAs and PPAs with MMWEC. Under these agreements, the Department is required to make certain payments to MMWEC. The aggregate amount of Hudson Light and Power Department's required payments under the PSAs and PPAs, exclusive of the Reserve and Contingency Fund billings, through MMWEC at December 31, 1998 and estimated for future years is shown below.

		ANNUAL COSTS	
For years ended December 31,	1999	\$	11,601,000
	2000		11,652,000
	2001		11,657,000
	2002		11,654,000
	2003		11,679,000
	Later fiscal years		<u>157,854,000</u>
<b>Total</b>		\$	<b>216,097,000</b>
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In addition, the Department is required to pay its share of the Operation and Maintenance (O&M) costs of the Projects in which they participate. The Department's total O&M costs including debt service under the PSAs were \$16,994,000 and \$17,573,000 for the years ended December 31, 1998 and 1997, respectively.

# Receipts and Expenditures

Cash Balance -- January 1, 1998 \$ 6,711,700.89

		Received	
<b>Receipts...</b>			
Residential Sales	\$	7,426,353.12	
Commercial Sales		1,920,146.50	
Industrial Sales		17,083,275.26	
Street Lighting		93,650.91	
Yard Lighting		99,089.26	
Municipal Sales		1,108,040.40	
Consumer Deposits		70,942.23	
Int. on Consumers' Deposits		18,865.18	
Int. on Invested Funds		254,571.91	
Rate Stabilization Trust		0.00	
Sundry Revenues		2,693,386.08	
<b>Total Receipts</b>			\$ 30,768,320.85

		Paid Out	
<b>Expenditures...</b>			
Returned to Town	\$	225,000.00	
Consumers' Deposits Refunded		95,390.00	
Consumers' Deposits Interest Paid		6,241.26	
Payrolls		1,587,528.10	
Inv. for Supplies, Serv., etc.		25,920,029.22	
Rate Stabilization Trust		0.00	
Employees' Retirement Trust		0.00	
<b>Total Expenditures</b>			\$ 27,834,188.58

Cash Balance -- December 31, 1998 \$ 9,645,833.16

# Revenue from Sales of Electricity

January 1, 1998 to December 31, 1998

	HUDSON	STOW	OTHER	TOTAL
Res. Service "A"	\$ 3,182,745.36	\$ 1,141,105.25	\$ 50,972.63	\$ 4,374,823.24
Res. Wtr. Heater "E"	563,338.21	377,527.88	21,903.81	962,769.90
All Elec. Service "F"	868,878.31	304,056.25	9,284.92	1,182,219.48
Com. Htg. & Air Cond.	1,965.50	1,411.49	0.00	3,376.99
Com. Service "C"	1,200,493.43	373,555.78	5,859.28	1,579,908.49
Large Power "D"	11,764,601.33	828,898.09	0.00	12,593,499.42
Municipal All Elec.	97,102.08	0.00	296,176.92	393,279.00
Municipal Service "C"	67,256.40	13,773.18	0.00	81,029.58
Municipal Power "D"	346,460.21	102,989.59	0.00	449,449.80
Street Lighting	94,160.30	5,151.63	86.40	99,398.33
Yard Lighting	69,167.95	10,239.38	812.81	80,220.14
<b>Power Adjustment Charges...</b>				
Res. Service "A"	\$ 406,746.82	\$ 148,806.33	\$ 6,617.57	\$ 562,170.72
Res. Wtr. Heater "E"	77,269.16	52,728.29	3,072.21	133,069.66
All Elec. Service "F"	129,301.47	45,421.69	1,386.45	176,109.61
Com. Htg. & Air Cond.	444.31	336.02	0.00	780.33
Com. Service "C"	238,721.64	73,835.37	1,127.38	313,684.39
Large Power "D"	4,069,144.33	255,129.40	0.00	4,324,273.73
Municipal All Elec.	15,120.86	0.00	46,396.22	61,517.08
Municipal Service "C"	13,561.72	2,668.71	0.00	16,230.43
Municipal Power "D"	93,632.36	26,412.80	0.00	120,045.16
Street Lighting	0.00	768.47	7.00	775.47
Yard Lighting	11,124.90	1,555.80	114.38	12,795.08
<b>Total Rev. Each Zone</b>	<b>\$ 23,311,236.65</b>	<b>\$ 3,766,371.40</b>	<b>\$ 443,817.98</b>	<b>\$ 27,521,426.03</b>

Misc. Electric Sales \$ (182,464.48)

**Total Revenue from Sale of Electricity** \$ 27,338,961.55

Res. Service "A"	\$ 4,936,993.96
Res. Service "E" Wtr Htr	1,095,839.56
All Elec. Service "F"	1,358,329.09
Com. Htr. & Air. Cond	4,157.32
Com. Service "C"	1,893,592.88
Large Power "D"	16,917,773.15
Municipal All Elec.	454,796.08
Municipal Service "C"	97,260.01
Municipal Power "D"	569,494.96
Street Lighting	100,173.80
Yard Lighting	93,015.22
<b>Total</b>	<u><u>\$ 27,521,426.03</u></u>

# Statistics

## Kilowatt-hours Generated, Purchased, Sold and Used

January 1, 1998 to December 31, 1998

Kilowatt-hours Generated	10,224,094
Kilowatt-hours Purchased	324,679,126
<b>Total Generated &amp; Purchased</b>	<b>334,903,220</b>

	HUDSON	STOW	OTHER AREAS
<b>Kilowatt-hours Sold...</b>			
Residence Service "A"	34,353,616	12,568,135	558,921
Service "E" (wtr htr)	6,526,090	4,453,389	259,477
All Electric Service "F"	10,920,739	3,836,285	117,099
Htg. and Air Cond. for Business	22,240	16,820	-
Commercial Service "C"	11,942,767	3,699,939	56,430
Large Power "D"	203,699,462	12,771,155	-
Departmental Usage	268,034	-	-
Municipal All Electric	1,277,100	-	3,918,600
Municipal Service "C"	678,865	133,590	-
Municipal Power "D"	4,687,009	1,322,160	-
Street Lighting	1,157,201	40,156	350
Yard Lighting	554,630	77,850	5,723
<b>Total Kilowatt-hours Each Zone</b>	<b>276,087,753</b>	<b>38,919,479</b>	<b>4,916,600</b>
<b>Total Kilowatt-hours distributed</b>			<b>319,923,832</b>
Kilowatt-hours sold for resale			-
Kilowatt-hours used at Station and misc.			1,535,193
Kilowatt-hours lost in Station & Transmission			4,413,121
Kilowatt-hours lost in Distribution Lines			9,031,074
<b>Total</b>			<b><u>334,903,220</u></b>
Percent lost in Distribution Lines		2.6966%	
Percent lost in Station and Transmission Lines		1.3177%	

## Five-Year Comparative Electric Sales Data

	1998	1997	1996	1995	1994	1993
<b>Customers...</b>						
Residential	9,179	9,103	9,052	8,986	8,939	8,666
Commercial	1,046	1,010	995	1,003	973	1,102
Industrial	162	165	173	164	174	189
Municipal	95	93	92	91	92	89
Others	<u>185</u>	<u>183</u>	<u>184</u>	<u>174</u>	<u>167</u>	<u>161</u>
<b>Total</b>	<b>10,667</b>	<b>10,554</b>	<b>10,496</b>	<b>10,418</b>	<b>10,345</b>	<b>10,207</b>

### Kilowatt-hour Sales...

Residential	73,593,751	72,328,783	72,355,738	70,357,575	70,167,817	67,593,087
Commercial	15,738,196	14,580,064	13,185,284	12,507,528	11,979,034	11,747,838
Industrial	216,470,617	219,002,371	230,279,236	222,450,581	210,469,687	163,787,225
Municipal	13,215,031	13,497,078	13,405,465	13,115,187	13,363,742	13,290,623
Other	<u>638,203</u>	<u>636,341</u>	<u>631,523</u>	<u>599,900</u>	<u>577,213</u>	<u>554,649</u>
<b>Total</b>	<b>319,655,798</b>	<b>320,044,637</b>	<b>329,857,246</b>	<b>319,030,771</b>	<b>306,557,493</b>	<b>256,973,422</b>

### Revenues Billed...

Residential	\$ 7,391,162.61	\$ 7,190,377.85	\$ 6,789,140.00	\$ 6,602,188.07	\$ 6,400,309.94	\$ 7,391,178.23
Commercial	1,897,750.20	1,752,099.62	1,525,642.13	1,491,902.26	1,484,858.75	1,704,001.18
Industrial	16,917,773.15	17,013,750.36	16,980,407.00	17,234,592.86	17,237,596.96	17,097,789.02
Municipal	1,221,724.85	1,231,965.54	1,174,029.34	1,167,060.57	1,193,990.80	1,406,281.43
Other	<u>93,015.22</u>	<u>90,475.65</u>	<u>86,085.49</u>	<u>80,715.29</u>	<u>70,364.57</u>	<u>75,630.22</u>
<b>Total*</b>	<b>\$ 27,521,426.03</b>	<b>\$ 27,278,669.02</b>	<b>\$ 26,555,303.96</b>	<b>\$ 26,576,459.05</b>	<b>\$ 26,387,121.02</b>	<b>\$ 27,674,880.08</b>

*\*Does not reflect accounting adjustments for power charges.*



# Personnel

## *Hudson Municipal Light Board*

Weedon G. Parris, Jr., Chairman

Roland L. Plante, Member

Horst Huehmer, Clerk

## *Staff*

Anthony J. Monteiro

Scott M. Baker

David C. Bianco

Robert A. Booth

Paul J. Buteau

Charles J. Charbonneau

Emanuel J. Chaves

Ronald P. Chiasson

Karen A. Corbin

Walter G. Farquharson

William D. Gould

Carolyn A. Hanson

Michael J. Hope

Joan L. Jennette

Frank E. Kelley

Gregg R. Kenyon

Mary Ann Kenyon

Kevin E. Kittredge

Victor Lambert

Yakov D. Levin

Helena M. Marshall

Daniel Murphy Jr.

Mark R. Parker

Ricky C. Peck

Joseph M. Perry

Eduino M. Rego

W. Jerry Roosa

Joseph J. Rossley, Jr.

Judith A. Salser

Karen F. Sawyer

Karl M. Siniawski

Richard L. Veo

Jason Wardwell

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*Power Station: 59 Cherry Street, Hudson, MA 01749*

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